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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,776	03/10/2004	Brad Underwood	200313420-1	4159
22879	7590	08/14/2006		EXAMINER
				LUU, AN T
			ART UNIT	PAPER NUMBER
				2816

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/797,776	UNDERWOOD ET AL.	
	Examiner	Art Unit	
	An T. Luu	2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 March 2006.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 21-28 is/are allowed.
- 6) Claim(s) 1,2,5-8,12-14,16-18 and 20 is/are rejected.
- 7) Claim(s) 3,4,9-11,15 and 19 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Applicant's Appeal Brief filed on 3-13-06 has been received and entered in the case. The rejections set forth in the previous Office Action are withdrawn and a new ground of rejection is presented as indicated below.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 5-8, 12-14, 16-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by the Lundh et al reference (US Patent 6, 310,895).

Lundh discloses in figure 2 a distributed redundant control signal distribution system, said control system comprising a first control signal source (i.e., Generator 1 of plane A) co-located with a first set of control signal controlled circuit elements (i.e., Data circuit 4 of stage II of Plane A); at least one second control signal source (i.e., Generator 1 of plane B) co-located with a second set of control signal controlled circuit elements (i.e., Data circuit 4 of stage II of Plane B), a first controller (i.e., element 3 of plane A) , and at least one second controller (i.e., element 3 of plane B) ; said first controller and second controller operable for substituting signals from said second control signal source for signals from said first control signal source if said signals from said first control signal source become unavailable to either said first or second circuit elements (See Col. 4, lines 1-4) as required by claim 1.

As to claim 2, figure 1 shows signals supplied from generators are for running different system within data circuit 4. Therefore, they are seen as system clocks.

As to claim 5, col. 10, lines 64-66, discloses element 3 comprising a multiplexer for selecting which one of said control signals controls said controlled circuit elements.

As to claim 6, figure 7c and its associated description disclose multiplexers having a preset hierarchical control among their respective inputs (i.e., CLSY-A, CLSY-B and CLSY-C).

As to claims 7 and 8, figure 1 discloses each MUX being co-located with its respective said circuit elements.

As to claim 12-14, they are rejected for reciting method/step derived from the apparatus of claim 6 as noted above. It is noted that “detection of a lack of a control signal” limitation is seen as “a control signal” is faulty as defined in the specification of the Lundh reference. And, col. 13, lines 3-12, and figure 7c disclose signal in the first electronic board (i.e., plane A) to dominate over signals in planes B and C.

As to claims 16 and 17, the scopes of claims are similar to that of claim 6. Therefore, it is rejected for the same reason set forth above.

As to claim 18, the scope of claim 1 similar to that of claim 8. Therefore, it is rejected for the same reason set forth above.

As to claim 20, it is rejected for reciting a method derived from the apparatus of claim 16 which is rejected as noted above.

Response to Arguments

3. Applicant's arguments, see Appeal Brief, filed 3-13-06, with respect to the rejection(s) of claim(s) under 35 USC 102b have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the Lundh et al reference.

Allowable Subject Matter

4. Claims 3, 4, 9-11, 15 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 21-28 are allowed.

6. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to disclose an apparatus and method thereof comprising elements being configured as recited in claims. Specifically, none of the prior art teaches or fairly suggests the following limitations:

- *Said first and second sets of circuit elements are interconnected by at least two transmission paths and wherein said controlling signals travel over both of said transmission paths as required by claim 3.*
- *At least a third set of control signal controlled circuit elements wherein signals from said first control signal source control said third set of controlled circuit elements, said third set of controlled circuit elements having co-located therewith a controller for substituting signals from said second control signal source for said signals from*

said first signal control source if said signals from said first signal control source become unavailable as required by claim 9.

- *Said second electronic board said hierarchy control allows signals originating on said first electronic board and provided to said second electronic board over a pair of transmission links to dominate over said control signals originating on said second electronic board as required by claim 15.*
- *Said at least one signal connector is a plurality of independent transmission paths; and wherein said controllers accept signals from each of said transmission paths for said hierarchical selection as required by claim 19. And,*
- *The controller of the first node operates in tandem with the controller of the second node to alternatively select between control signal sources of the first and second node to supply a control signal to the first set and second set of circuit elements as required by claim 21.*

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to An T. Luu whose telephone number is 571-272-1746. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

An T. Luu
7-25-06 *ml*



QUANTRA
PRIMARY EXAMINER